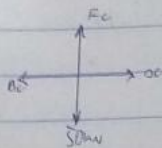


at C \Rightarrow



from calculated example,

$$BC = 50 \text{ kN}$$

$$\therefore -BC + FC = 0 \quad (\text{Resolving to horizontal})$$

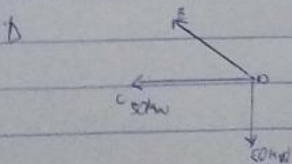
$$-50 + FC = 0$$

$$FC = 50 \text{ kN (Tension)}$$

Resolving to vertical

$$50 \text{ kN} + FC = 0$$

$$FC = 50 \text{ kN (Tension)}$$



$$\text{Resolving to horizontal} = -50 \text{ kN} - OE \cos 45 = 0$$

$$50 \text{ kN} = -OE \cos 45$$

$$= -70.7$$

5

DE = 70.7 compression

P (kN)	t (m)	a (cm ²)	P = $\frac{F}{a}$ (kN/m ²)	u	Pu
-70.71	4.24	0.0004	-176775	-0.471	83
50	3	0.0004	125000	0.333	47
50	3	0.0004	125000	0.666	83
50	3	0.0004	125000	0.333	47
50	3	0.0004	125000	-0.333	-47
0	4.24	0.0004	125000	-0.471	0
50	3	0.0004	125000	1.000	125
-70.71	4.24	0.0004	-176775	-0.942	706
50	3	0.0004	125000	0.666	249
		0.0004			Σ = 205

$$\frac{\sum Pu}{E} = \frac{2058455.26}{200000} = 10.29 \text{ mm}$$